# SIEC Briefing Paper Washington State Department of Transportation Application to the Department of Homeland Security for Technology and Processes Enabling Public Safety Interoperability

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## Description

The Washington State Department of Transportation (WSDOT) has gone to the SIEC Advisory Work Group and received approval to have this project be forwarded to the SIEC. This project if approved by the Department of Homeland Security would test new technology, legacy equipment, and a new spectrum for this state (700 MHz). This test may become one of the long-term alternatives to promote interoperability within the state.

WSDOT will partner with several private-sector companies using new and innovative technology designed to solve communication interoperability problems commonly encountered by public safety agencies today. It is anticipated that this project, if approved will have immediate benefits to Okanogan, Douglas, Kittitas, Grant, Chelan and Yakima counties.

## Recommendations to the Committee

This is a report only, without staff recommendations.

## Status

This grant application is on file with the Department of Homeland Security (DHS). As of this date, no decision has been made by the DHS as to funding this project.

## Issues

- This project would be the first project in this state to use the new 700 MHz spectrum to promote interoperability.
- This project will test the capability of using several technologies together with legacy equipment to aid in interoperability.
- WSDOT has included $500,000 that could be used by the SIEC for planning.

## Background

The Washington State Patrol (WSP) made a presentation to the SIEC Advisory Work (SAW) Group on October 29 in behalf of the Washington State Department of Transportation (WSDOT). The presentation was asking for the SAW Group to endorse a project that would assist WSDOT and WSP in overcoming problems relating to interference issues and insufficient bandwidth by migrating to a digital 700 MHz system that would follow Project-25 standards.

The problem is that the North Central Region of the state is rural with few urban areas. Several cross-mountain highways, one of which is Interstate-90 connects these rural regions. Although the most of the Interstate has cellular and PCS coverage, most rural highway system have little, if any reliable coverage.

The cities, towns and state agencies serving the citizens have communications problems during minor and major incidents because each operates on a disparate and incompatible radio network.

WSDOT and its partners believe that some technical solutions now exist that will help overcome the state's communications interoperability problems. If approved by the Department of

Homeland Security, this project will deploy a 700 MHz infrastructure and a test-bed of 135 mobile units to demonstrate application feasibility of use in mountainous terrain operating through a smart interconnective digital switch. This project will connect part of the 700 MHz infrastructure with the state's fiber optic network and microwave backbone, and deploy appropriate data file servers to manage the distribution of data and control the mountaintop infrastructure.

If this project is successful, it will give the WSDOT additional spectrum for voice and data, it will also give WSP additional bandwidth for data applications. It is also anticipated that all jurisdictions included in this area will be allowed to use this infrastructure for voice and data applications.